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## The “Blink Sign” in Dermoscopy

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**C**ERTAIN DERMOSCPIC STRUCTURES ARE more conspicuous with nonpolarized dermoscopy (NPD), while others are more conspicuous with polarized dermoscopy (PD).<sup>1,2</sup> The introduction of “hybrid” dermoscopes allows the user to toggle between polarized and nonpolarized light. We found that structures that are more conspicuous with either NPD or PD appear to “blink” when the observer toggles between light modes. **Figure 1** is a melanoma. With PD (Figure 1B), shiny white lines, or crystalline structures (formerly called chrysalislike structures) are visible.<sup>3</sup> Because they are not visible with NPD (Figure 1A), they appear to blink when the observer toggles between NPD and PD (**Video 1**, <http://www.archdermatol.com>). **Figure 2** is a seborrheic keratosis. With NPD (Figure 2A), multiple comedo openings and milia cysts are seen. Be-

cause milia cysts and comedo openings are less conspicuous with PD (Figure 2B), they blink when the observer toggles between light sources (**Video 2**).

In our experience, the presence of crystalline structures, which can easily be confirmed via the blink sign, can assist in detecting amelanotic and nodular melanoma, thereby increasing diagnostic sensitivity.<sup>3</sup> The presence of multiple milia cysts, which can also easily be seen via the blink test, increases diagnostic specificity by helping to correctly identify seborrheic keratosis.

1. Pan Y, Gareau DS, Scope A, Rajadhyaksha M, Mullani NA, Marghoob AA. Polarized and nonpolarized dermoscopy: the explanation for the observed differences. *Arch Dermatol*. 2008;144(6):828-829.
2. Benvenuto-Andrade C, Dusza SW, Agero AL, et al. Differences between polarized light dermoscopy and immersion contact dermoscopy for the evaluation of skin lesions. *Arch Dermatol*. 2007;143(3):329-338.
3. Marghoob AA, Cowell L, Kopf AW, Scope A. Observation of chrysalis structures with polarized dermoscopy. *Arch Dermatol*. 2009;145(5):618.

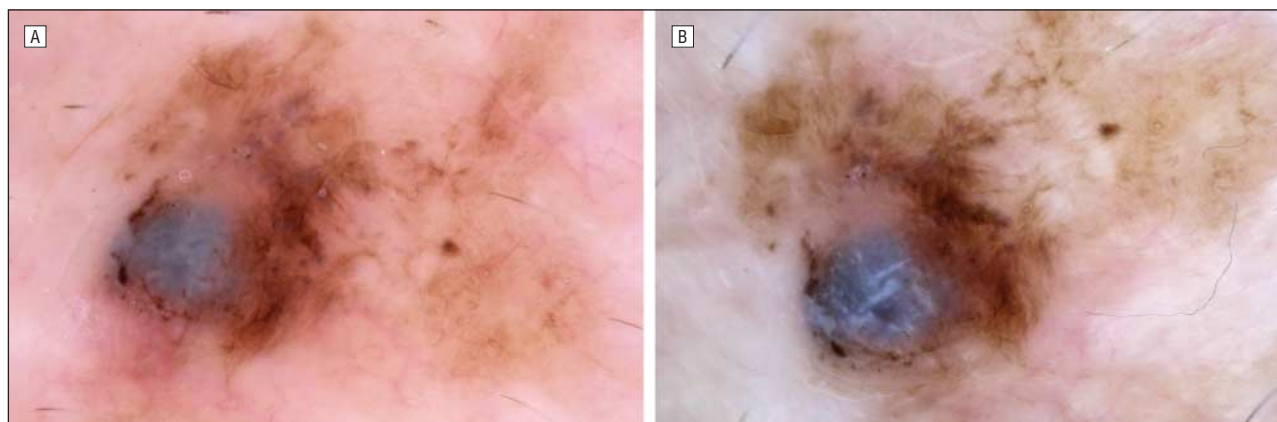


Figure 1.

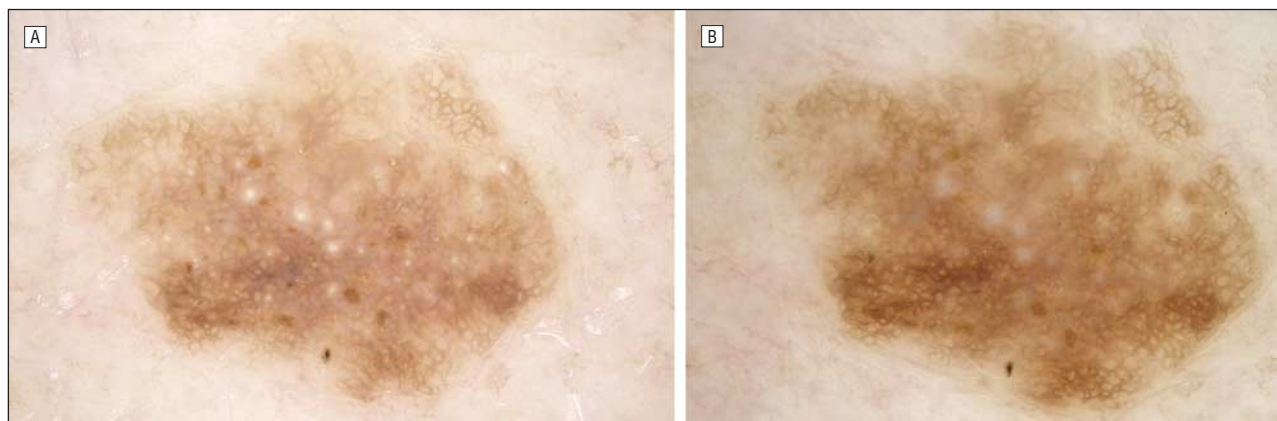


Figure 2.